THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

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BALTIMORE: TUESDAY, JULY 3, 1838.

We have received the first number of a new paper published at Burlington, New Jersey, by Messrs. Ward Cheney and Brothers, entitled, *The American Silk Grower*, which, as its name imports, is to be devoted to the Silk Culture. We hail its appearance with feelings of pleasure, believing that it is within the power of its enlightened conductors to render it a most able advocate of this branch of husbandry. The Messrs. Cheney are practical men, largely engaged in the Silk business, and, therefore, will be safe advisers of the public. We most heartily wish them success.

We have received several numbers of the Delaware Register, a monthly periodical established a few months since at Dover, Delaware. It is devoted to the purposes of agriculture, the history of Delaware, and general literature. The numbers we have received are filled with excellent matter, and evince good taste, sound judgment, great industry and a chastened zeal. The reminiscences of the gallant *little State* already published are highly interesting, embracing periods in her history and individuals dear to the bosom of patriotism. The literary as well as agricultural communications are good, and we express but the unfeigned sentiment of our heart, when we *wish* it may receive a liberal support; nay, that it may receive the *patronage* of every man in Delaware who is *able* and *willing* to *pay* for his subscription; for non-paying *patrons* are but as abominations in printers' bones.

Dutton Corn.—We have had for several days, a small patch of this excellent variety of corn in tassel.

The hay harvest in this quarter is abundant, and the hay has, thus far, been got in uninjured.

Cultivation of Beets.—Those who have *small* patches of beets would find it to their interest to use the spade in, and as auxiliary to, their culture. Let the spade be inserted between the rows so as to loosen the earth around the roots without otherwise disturbing of them. It is not meant that the earth should be turned up, but that it should be simply *raised*. Beets thus cultivated will attain an almost incredible size. An acre thus cultivated could be made to yield 5000 bushels.

We have received a copy of the annual catalogue of our old friend Sinclair, of the good things in the way of fruits, shrubs, and flowers, to be found at the *Clairmount Nursery*. The list shows that he keeps pace with the spirit of the age, and offers inducements to purchasers, both in the quality and quantity of his assortments in all the departments appertaining to agriculture and horticulture.

Timothy Meadows.—Last year a friend of our's had one of the best *set* timothy meadows for its age we had then ever seen. It was its *first* cutting, and we are confident it cut upwards of two tons to the acre: this season, however, it is a most sorry substitute for a *timothy* meadow, as in one year the *timothy* has been fairly ejected to make room for more unprofitable occupants—not more than one-fifth of as many spears of the former grass being now standing as were last year. We account for it in this way. Our friend was not content that his meadow should yield him a most luxuriant crop of good hay; but he grazed it in the field until every blade and stump of grass were literally *razed* to the earth; so that between the injury from the hoofs of the cattle and horses, and exposure to the winter, four-fifths of the timothy was killed. This fact should be a warning to others.

SURREY FARM.

We notice with regret, that our friend and neighbor, the proprietor of this fine estate, has offered it for sale. Our regret is of a two-fold character: first, that we shall lose a most excellent neighbor, and secondly, that the vicinage will be deprived of the example of a good farmer.

Having thus spoken of its owner, let us say a word or two of the farm. The soil, originally, was what is generally termed *kind land;* but having been the property for forty or fifty years, of gentlemen whose means were as ample as their agricultural ambition and desire to excel were laudable, it has received the benefits of modern improvement, and is now better than when it was first cleared. Its present owner has, with a liberality worthy of the noble science of agriculture, been generous to his fields, and awarded them abundant supplies of lime and ashes; nor has he been sparing of the products of the barn and the stable, or dealt out with a stinting hand that fine fructifying agent—street dirt. These means, applied with full hands and enlightened heads, aided by judicious courses of cropping, have not only been the means of preserving the land in its pristine vigor, but of pushing its powers of fruitfulness far beyond that point, as is attested by the present abundant crops now growing on the fields of *Surrey*. Of the buildings of this estate it may be said they are all that a gentleman need require: a spacious and elegant mansion, with barns, stables, outhouses and offices to correspond, offer every thing by the way of accommodation that the heart of the most ambitious could desire. As a residence for a gentleman of fortune, few situations around Baltimore combine equal attractions. In looking over the noble edifice that adorns the grounds, and viewing the well arranged fields, now clothed with abundance, one cannot resist wondering how humanity, in its most lofty aspirations, could desire a more lovely home than this. But if it must be our lot to lose the kind offices of so good a neighbor, and to be deprived of the wholesome influence of his well regulated, enterprise and skill, we shall console ourself with the hope that in his contemplated change of position he will more than realize his fondest anticipations.

Do not attempt to feed a great number of worms until you have some knowledge of ther habits, derived from experience, otherwise you may not meet with complete success. A few well attended to the first season will do you most good.—*Silk Grower.*

[From the American Silk Grower.]

THE MORUS MULTICAULIS.

Every one in the least acquainted with the means of producing silk well knows that the first matter requiring attention is to provide a plentiful supply of food for the silk-worm. The leaves of the mulberry tree are not the only leaves which the worm will eat, but for aught that is known they are the only food on which the worm will feed and afterward spin silk. There are many varieties of mulberry trees. Those most cultivated by the silk-growers of all countries are the Morus Alba or White Mulberry, the Brussa, and the Morus Multicaulis, commonly called the Chinese Mulberry. We have cultivated all these varieties, and have fully satisfied ourselves which of them is most valuable. No doubt a very handsome profit may be obtained by converting the leaves of the White Mulberry into silk. Experience has abundantly proven that this is the case. The leaf of the Brussa is larger than that of the White Mulberry. For this reason we prefer the former to the latter. We, however, give the Morus Multicaulis the decided and unequivocal preference over all the other known species of Mulberry trees. Among practical silk-growers we believe there is very little if any difference of opinion on this subject. This tree has now been in our country several years, and the more it becomes known the more it is valued and sought after. We will give a few of the most obvious reasons why we prefer the Morus Multicaulis to the White Mulberry. It takes the latter five years at least to grow large enough to afford foliage sufficient to feed many worms. But from the Morus Multicaulis of the first year's growth we have fed worms in such numbers as to obtain from 50 to 100 lbs. of silk from the leaves growing on an acre of land worth from $250 to $500. It has another advantage of still greater magnitude. The leaf of the Morus Multicaulis is 8 times larger than that of the White Mulberry, therefore the labor of gathering it is reduced in the same ratio. This is a very weighty consideration, inasmuch as the picking of the leaves is the great item of expense in making raw silk. The weight of leaves which the Multicaulis will produce is a hundred per cent. more than the White Mulberry affords where the trees are of equal age and on the same extent of ground. This is not all. The Multicaulis can be propagated more abundantly and cheaper than the Morus Alba or any other tree with which we are acquainted. Many persons have expressed fears that the Morus Multicaulis would not endure a northern winter. When the tree was first imported and planted in New England, it suffered from the unprecedented cold of some of the late winters—But it has now become acclimated and will live after being protected the first winter of its life. In the middle and southern states we have not heard that it has been injured by the cold weather. We have now growing on our silk plantation in this town many of these trees, which have remained in the open field without the least protection since last summer, and they are now as thrifty and hardy as any of our native forest trees. That the Morus Multicaulis, with proper management, will endure the climate of New York and New England, we have abundant evidence. That it will flourish in Pennsylvania and the southern portion of the union is not here deemed questionable.—Experience has proven it. At the north the tree must be protected the first winter. At the south even this is not necessary.

We do not think it advisable to attempt to propagate the Morus Multicaulis from the seed as it is extremely difficult to procure it and hardly possible to distinguish the seed of the genuine Chinese Mulberry from that of the less valuable varieties. Nor should these objections be obviated, is it by any means certain that a tree can be grown from the seed of the Morus Multicaulis which will resemble the tree from which that seed was taken. This has been demonstrated by many experiments. Nothing can be gained by attempting to grow the Multicaulis from seed, but much may be lost by it. The tree can be produced from layers or cuttings more quickly, cheaper, and certain, than by any other method.

Any land that is suitable for raising a crop of corn will do for cultivating the Chinese Mulberry. A dry warm sandy loam is quite congenial to its nature. A cold, damp, or heavy soil will not answer. It will thrive tolerably well on poor land, but much better on that which is fertile. Prepare the ground as for a crop of corn, and at the same season furrow it into 3½ feet asunder. Then scatter well-rotted manure in the furrows two inches deep. Trim the trees of every limb, and lay them in the furrows so that they will just reach each other, cover them up about as deep as corn is usually planted, except the roots, which should be buried deeper. Carefully preserve all the limbs and plant them in the same way. Ten trees are often thus procured from one. In about three weeks, should the weather prove favorable, sprouts from the buried tree will break through the ground. After which, the earth about them must be stirred occasionally, and the weeds be kept down till August. Then let them entirely alone that they may ripen and the wood attain solidity before the coming of the autumn frosts. When the trees have done growing in the fall, pull or plough them up and cut them apart with a knife or pair of pruning shears. To preserve them through the winter, lay them down in the open field on dry ground—cover them with sand and they will be found fresh and in good order the next spring—Or they may be placed in a cellar with the roots resting on the ground with some dry earth placed about them.

If your object is to grow more trees you will, the ensuing spring, again plant according to the directions already given. But if you purpose to make a permanent plantation, you will, after ploughing the ground, set out the trees in rows 8 feet apart, and standing 2 feet from each other in the rows. When winter again draws near, cut off the trees near the ground and preserve the trunk and limbs for further increase. When spring returns the roots and stumps which were left in the ground will send up a great number of shoots, which will put forth a quantity of foliage that will be truly astonishing. By severing the tree near the earth several advantages are derived. The body and branches are thereby saved to be again planted. The tree is so valuable that this is an important consideration. The quantity of leaves which will grow on the sprouts is greater than could have been obtained from the whole tree had it been left standing. Leaves cannot be gathered from trees of much height without reaching or climbing up to them. But they may be plucked from shoots of one year's growth without any such extra exertion, and by children. This practice also comforts the croaker about "too cold a climate for the Morus Multicaulis," and places the silk business beyond the possibility of harm from the severity of northern winters.

There are other methods of cultivating the Chinese Mulberry, approved by gentlemen of intelligence, which we have tried, but we have been so much more successful when we have adhered to the course we now recommend that we shall speak of no other.

Large sums of money have been made by the cultivation and sale of our favorite tree. It has proved an exceedingly lucrative employment to those who have engaged in it. But we would advise that more than this should be aimed at by those who intend to embark in this new, and, as we think, important enterprise, viz. To make money by growing silk. This can be done, and our country become one of the greatest silk-producing regions on the globe, should our people but will to have it so. No competition in the business need be feared for a number of years to come, if ever. The bounty offered on silk by the state of New-Jersey will pay all the expense of making it, and leave the whole of the crop a clear profit. The bounty granted by Pennsylvania will do even more. Then why not advance in this great enterprise. Why remain idle when such weighty considerations invite to action. It is one of the most pleasant employments that ever were conducted under the sun. The lame, the halt, the widow and the orphan can perform the labor. Then why not permit them to do so and pay them a part of twenty millions, which is annually sent abroad in exchange for silks, and to feed foreign mouths, and enrich foreign aristocrats. This would afford thousands of the poor and feeble among us the means of comfort and independence, and make their hearts beat with pleasant emotion, and their eyes sparkle with gladness and joy, and at the same time add to the wealth, the honor, and the prosperity of our great country.

The publishers of this papers, in connection with Jedediah Strong, Esq. are now feeding more than half a million Silk Worms on the plantation of Mr. Repka, two miles above Dyott's glass-works, on the Point road, near Philadelphia. Mr. Strong is a gentleman whose experience in the management of the Silk-worm is great, and the raw silk produced under his direction has never been surpassed in this country. The plantation is managed by Mr. Ter Hoeven, and visiters to the establishment may depend upon being received courteously, and every information relative to the business will be cheerfully given. Those persons who feel an interest in the cause, or who wish to have their curiosity gratified, are respectfully solicited to visit the establishment. Those wishing a few Worms can be supplied at one dollar a thousand, by applying to Jedediah Strong, or J. Ter Hoeven, on the premises.—*ib.*

Arrogance is a weed that grows mostly on dunghills.

[From the Cultivator.]

MINERAL MANURES.

Although there is much to please and interest the mind in practical farming, yet devoid and apart from the theory, it is little else than a routine, suited to the capacity and ambition of uncultivated minds. An active and enlightened mind seeks to understand the cause and effect—to apply the sciences; in short, it is restive, until the queries embraced in agriculture, are disposed of and determined upon sound philosophical principles. 'Tis this constitutes theory! and 'tis this theory, that unfolds a world of beauties to the scientific agriculturist, of which the mere prejudiced practical farmer, the mere tyro and novitiate, must remain ignorant, and that too, of the highest branch of the profession which he follows.

The improvement which has been effected within the last twenty years in several of the eastern counties of Pennsylvania, (and especially in Chester,) is almost incredible. And the whole is mainly attributed to a regular and judicious use of lime as a manure. To me, it has been matter of astonishment, to find this inestimable restorative meet with so little favor in the minds of the conductor and correspondents of the Cultivator. My farm is situated in a district of secondary formation, and the soil is principally calcareous, yet I have seen the most surprising beneficial effects attending the free use of lime and plaster; the latter apparently reacting on the former, and consequently, the greatest benefit is derived by using them together. The crops, not only on my own farm, but on others in this vicinity, have been doubled by a free use of mineral manures. When a farm has been improved so as to produce heavy crops, there will be such a corresponding increase in the quantity of stable manure as to insure its future fertility. I look upon the immense beds of limestone in this region as an inexhaustible store, designed by the wise Governor of the World to keep up the strength of the land, in all time to come. I regard the limestone of Pennsylvania as a mineral, which will confer more real benefit on posterity than any of her other mineral treasures. The aid which it promises to contribute to the support and improvement of her agriculture cannot be easily overrated. Some idea may be formed of the estimation in which lime is held here as a manure, by the fact, that farmers come from 25 to 30 miles, i. e. from Maryland and the poor district of primitive formation in the southern part of Chester county, bordering on the Maryland line, to my limekiln and others in the neighborhood; the lime costing those farmers 25 cents per bushel when delivered. To the farmers in that quarter, lime is the "anchor of hope;" there it has already made the barren and desert place glad, and is fast putting a new and improved face upon the country. The farmers, even there, with this far fetched means of improving their land, prefer bettering their condition by liming near a good market, rather than migrate to the exuberant soil, and realize the utopian dreams and fairy tales of the "far west."

On part of my farm, 300 bushels of lime per acre have been applied within 30 years, at the rate of about 100 bushels per acre at a dressing, and always put on fresh, and slaked, then immediately spread. I am not inclined to believe that lime should become carbonated before it is applied. I adopt Sir Humphrey Davy for my prototype, in every case involving agricultural chemistry. I shall be encouraged so to do, until some modern wiseacre can clearly demonstrate that Sir H. is wrong. Doubtful points in Davy's theory, have become demonstrable truths with me, after being aided and enlightened by the lamp of experience. Lime, in its fresh caustic state only, while an alkali, acts as a decomposing agent in the soil; rendering vegetable substances soluble—but when a mild carbonate, it operates only like marl, in improving the texture of the soil, acording to Davy, whose authority is unquestionable, and the theory, at all events, may fairly challenge contradiction; hence the advantage of applying lime, like stable manure, in a fresh state.

With regard to the theory, or the manner, in which gypsum operates on vegetation, an accidental circumstance which occurred in my practice or under my own eye, goes further to establish the truth in my mind, than all the ink which has been spilled on the subject; even the adopted theory of Prof. Low and British Husbandry to the contrary notwithstanding. In April, 1832, I sowed half a bushel of plaster on a small piece of land in the middle of a wheat field, for experiment, in order to ascertain whether the plaster would have the slightest effect, even of changing the color of the wheat. The result answered my expectations; there was not a shade of change in the color of the wheat in the future stages of its growth. In autumn following, the same field was again ploughed for wheat, and the plaster of course turned down, the field was deeply ploughed, say 7 or 8 inches—the spring following, the field was sown with clover seed; the secret then was speedily developed; when the wheat was cut in harvest the growth of clover on that same land which had been sown with plaster, was so luxuriant as to interfere with the cradle in cutting the wheat. —Soon after harvest, the clover on the said land flowered, and a heavy swath might have been mown on it in September following. The adjacent parts of the field, with the same soil and culture, exhibited a sickly contrast. In the autumn of 1833, the clover on said land was trodden down by stock, returning manure to the soil, and by that means the plaster indirectly prepared the ground for a sure crop of wheat. This one single and simple fact serves to overthrow the theory that plaster must be sown on the plants, to be absorbed through the pores of the leaves—attract moisture from the atmosphere, &c. This mooted point I consider settled, and the soil and roots made the laboratory instead of the leaves and the atmosphere.

Although my agricultural career has been only short, yet the great object, improvement, has been ardently and zealously pursued—sufficiently, indeed, to create a most utter and implacable abhorrence against all vague and unfounded theory, which is the bane of the agricultural press. The mere conjecture of a writer, if in error, will do no harm; but 'tis the positive declaratory assertions, where wrong, that do mischief, inasmuch as many believe and adopt what they read.

Quere. Why is it that lime and plaster act much more efficiently when both are applied to the soil, since the base of both is lime?

WM. PENN KINSER.

Pequea, Lan. Co., Pa., April 15, 1838.

From the Yankee Farmer.

MOWING.

This is one of the most important operations in farming; a great deal of this work is to be done in a short time, and in a warm season, and it is of the greatest importance to lighten the labor as far as possible. We have seen some very stout hardy men toil and sweat all day, and do but a small day's work, while other men of much less strength would cut more grass, and yet not exert themselves to fatigue. From this it is evident that some mowers exert twice the strength that others do in performing the same work, and those who use the least strength usually do their work the best, though they may not render the field so smoth by cutting off the tops of knolls, stumps, stones, and other impediments that intrude themselves among the thick grass.

There are several reasons why there is so great a difference in the expense of labor; there is a difference in sneads and scythes as to their hanging well, and there is so great a difference in scythes as to their cutting with ease and holding their edge, that some are better worth five dollars than others are worth one cent. Some men keep their scythes in prime order, and in mowing they lay their strength out to the best advantage; they use a gentle motion that will not fatigue; they are less liable to strike stones, &c. than those who make exertions, and when they do strike them, less injury is done.

The best scythes should be chosen, as the difference in price between a very good one and one that is good for nothing, is a mere trifle; indeed the expense of a good scythe is less than its value above a poor one for only one day's use. A scythe should hang light and easy, so that in mowing no exertions will be necessary excepting to swing the scythe and hold it steady. We have seen some scythes and sneads, or things that had these names, so rigged that the strength of one man was necessary to hold them in a proper position, while that of another was needed to swing them; of course, by having a good scythe well hung, one half of the labor will be saved.

With good rigging and a good scythe kept sharp, a gentle swing of the scythe will be sufficient to do as much as is performed by those who get along by main strength instead of wise management. The motion of the scythe on even ground should be horizontal, by *pointing in and pointing out*, as the saying is, cutting the grass square at each side of the swath. Some mowers who labor hard, waste half of their strength, and do bad work, strike in over the tops of the grass, cutting it off lower and lower as the scythe approaches the middle of the swath, then rising as it goes to the other side; so that the middle of the swath for only about one-third of the width is cut sufficiently low. This is called the *square lop*, and it often brings the scythe in collision with obstructions in the middle of the swath, while one fourth or more of the grass is left on each side. At a mowing match, an old gentleman was showing his sleight at taking the *square lop*, when his scythe by some unaccommodating substance in the grass, was made into the shape of a rainbow.

Those men who labor to great disadvantage in mowing should get some that are well skilled in the business to select and hang their scythes, and

give them lessons in their work. We think this would be good economy. With a little trouble they could improve so as to perform more labour and save ten or twelve dollars' worth of strength in one season; this item saved annually will be very important to one who wishes 'to make a stout old man.'

EFFICACY OF LIGHTNING RODS, OR CONDUCTORS.

BY P. MACERONI.

I perceive that a question is mooted at the meeting of the British Association for the Advancement of Science, whether in the case of a certain "monument 140 feet high, erected on the summit of a mountain 1,400 feet high, augmented safety, or danger, would be the consequence of attaching to it a conductor or paratonnere?" I am induced to call the attention of your intellectual readers to this passage, as I am very sure that the subject is of great importance to society.—About six months ago (vol. xxvi. p. 367) you honoured me by giving insertion to my account of a safety gunpowder magazine, in which I speak of lightning conductors, and to which I would request your readers to refer. There is just now a gentleman, one Lieutenant Green, of the Royal Navy, who is endeavouring to convince the public by his writing, that conductors are prone to cause the damage they are intended to avert. I must say, that I regard this statement as a mischief, for I have seen too much of the saving power of conductors not to wish that every house in Great Britain were protected by one.

Lieut. Green, in his anti-paratonnere pamphlet, lately published by Tanner, of New Bond street, tells us of fifty churches in this country having been lately struck by lightning, because they had metal vanes! To be sure;—but metal vanes are not conductors; and conductors should not be formed of a wire scarcely bigger than a bell wire. In my above quoted article, I have stated, that a tube is better for a conductor than a solid rod, because it is to the surface of bodies that electricity adheres. Nothing could be fitter for the purpose than iron gas pipes; but their connexions and attachments, down the building, must be of stone, or other non-conducting materials.

Previously to the church of St. Peter's, at Rome, being protected by numerous conductors, by the French government, damage was continually being done to the upper part of that stupendous edifice; but never was the least injury inflicted after the application.

It must be borne in mind, that an elevated and efficient conductor will give its protection more frequently in perfect silence, and unobserved, than by conducting into the ground, or water, a positive discharge of electric matter, accompanied by a flash and thunder. The many-pointed conductors will silently draw off the electricity from a passing cloud, without any discharge, properly so called, so that the blow has been parried, if it be not a *bull* to say so, before it is struck.

During my several sojourns at Rome, I have made particular inquiries into the effects of lightning on St. Peter's church. After the numerous substantial, many-pointed conductors were affixed to the summit, and most prominent angles, of the church, by the French in 1808, an electric discharge was not known to have fallen upon it more than three times, and then it did no injury. It appears that the clouds, in passing over the church, are deprived of their plus electricity by the conductors, just as a Leyden jar is silently equilibrized by the presentation of a metallic, pointed conductor. How many ships would be saved from damage, conflagration, and, perhaps, instant submersion, by properly constructed vehicles for conveying the electric fluid over the sides into the water? What inconvenience could be felt, from a branched rod and a chain from the mast-head, hanging along the shrouds into the water! All the failures of conductors arise from their want of sufficient mass of metal. A zinc chain, or tube, would be far less liable to oxidation than iron; and, as I have before remarked in the case of a powder magazine, &c., the metal might easily be kept with a clear surface, by an occasional rubbing with a brick-bat. About London we see conductors not thicker than a quill, applied to shot towers, tall chimnies, &c. whereas they ought to be gas tubes of at least an inch in diameter. The top ought to be formed in the manner of a branch of a tree, with five or six points of copper gilt, the extreme points being of pure gold or silver, as are those at Rome.

In some volcanic districts, over which it would appear that the solidified crust of our globe, which covers the yet incandescent mass, is thinner or more porous, than at other points, the electrical exchange of compliments between the earth and atmosphere, are almost as frequently directed upwards from the earth to the clouds, as in the contrary direction. Even against such upward discharges, the conductors, inserted in the earth, and ascending to the summit of the building, will preserve them from injury. I have witnessed a great many instances of ascending streams of electricity, some of which I have remarked upon in your pages, particularly in Nos. 401 and 402; and I am induced to think that we should see many more exhibitions of the process, were it not for the trees which act as silent conductors, both upwards and downwards. Electricity is the real food of plants, which they absorb through the innumerable points of their leaves and branches.—On the same principle should a lightning-conductor be constructed with as many points as convenient.

Lieutenant Green says, "seventy-nine churches in Great Britain have in a few years been struck; some of them destroyed; many, after being furnished with from one to four conductors. All of those struck had metal vanes." How "many," out of the seventy-nine churches, were furnished with conductors, this opponent to Benjamin Franklin, does not tell us. He only shows the danger of metal vanes inviting the lightning, without a conductor to take it away. A bit of wire attached to the walls by iron eye bolts, or staples, is certainly more likely to cause mischief than to give protection. A proper and elevated conductor will generally carry off the electricity silently, without any apparent discharge.*

Lond. Mech. Mag.

* *Note.* The above article is inserted because the fact stated respecting St. Peter's Church is deemed important; it otherwise assumes as facts what requires to be verified.—*Ed. Frank. Inst.*

SOILS.

Loams are the most desirable of all soils to occupy. They are friable; can in general be cultivated at almost any season of the year; are ploughed with greater facility and less strength than clay; bear better the vicissitudes of the season; and seldom require any change in the rotation adopted. Above all, they are particularly well adapted for the convertible husbandry; for they can be altered not only without injury but generally with benefit, from grass to tillage, and from tillage to grass. They should not, however, be kept in tillage too long, nor while they are in cultivation, should two crops be taken in succession.

Loams are of four sorts; 1, Sandy; 2, Gravelly; 3, Clayey; and, 4, Peaty.

1. A sandy soil and a sandy loam, are easily distinguished. A sandy soil is always loose and crumbling, and never gets into a clod, even in the driest weather; whereas a sandy loam, owing to the clay that is mixed with it, retains a degree of adhesion or cloddiness, after wetness or drought, and will not suddenly crumble down with the application of machinery for that purpose.

A mellow, rich, crumbling sandy loam, adhesive enough to fear no drought, and friable enough to strain off superfluous moisture, if incumbent on a sound sub-soil, is the most profitable of all soils, being managed with much less expense than any other soil, and raising with advantage, every species of crop that the climate will admit of.

2. Gravelly loams when warm, sound and dry, or free from springs, are useful soils, more especially in wet seasons and climates.

3. A clayey or still loam, is nearly allied to brick earth. Though the soil might have originally been poor, cold, and hungry, yet if it be well drained, according to the Essex system, and highly manured, it will yield great crops. It is found well adapted for the dairy in Cheshire.

4. Peat, in some of its varieties, may likewise be converted by culture, into a species of black soft loam, and in that state it becomes highly fertile and productive.

Loams will produce hemp and flax, in the greatest perfection and abundance, besides the other crops usually cultivated in this country; and in rich loams, where the substance is both dry and open, lucerne might be more generally grown than it is, in preference to other grasses.

Before the subject of soils is dismissed, there are some miscellaneous particulars which merit attention; 1. The means of ascertaining their composition; 2. The nature of mould so essential for their fertility; 3. Their colour; 4. The importance of cultivating good soil; and, 5. The general principles on which their improvement may be effected.

1. That the most efficient methods for improving soils may be adopted, it is necessary that their composition should be known. A distinguished philosopher has suggested a plan for that purpose, which can easily be carried into effect by any person at all conversant in chemical researches. But the generality of farmers have not the means of entering into such researches; yet they are able, by observation and experience, to discover the most important deficiencies of the soil they cultivate. This may be effected, by comparing their own soils with each other, and with the most fertile in their immediate neighbor-

hood. The great object they ought to keep in view is, to render a soil capable of receiving and retaining such a due quantity of moisture, as may be sufficient to nourish the vegetables that grow in it, and to absorb or to throw off, that superfluous water which would prove injurious.

2. Mould, which contains a mixture of animal and vegetable remains, particularly from putrefaction, is an essential ingredient in all fertile soils. It arises from the decomposition of the roots and leaves of vegetables on grass-land, and the stubble and roots of grain crops, on arable. This process on grass lands is very slow; for it is calculated that it proceeds at the rate of only one inch in a century. Considerable accumulations of this mould, are likewise produced from the leaves of trees, amassed for a number of years, and rotted on the surface. When in addition to vegetable, there are animal remains, in a state of decomposition, the soil is distinguished for its fertility.

3. It is of essential consequence, when the surface is bare and exposed to the rays of the sun, that the color of the soil should be such, as to attract and absorb the greatest heat from the sun and the atmosphere, more especially in spring.

Soils are of various colors; the principal are white, black and red.

White stiff clays are heated with difficulty, and being usually very moist, they retain their heat only for a short time.

A black soil, containing much vegetable matter is most easily heated by the sun and air. Its temperature has increased from 65 to 88 by exposure to sunshine for an hour. A chalky soil, under the same circumstances, was heated only to 69 degrees. In the shade, however, the black mould lost its heat more rapidly.

The red color in soils, is owing to iron in various combination. That which approaches nearest to the metallic state, is considered by some the most favorable.

4. It has been justly remarked, that too much can hardly be paid for a good soil, and that even a low rent will not make a poor one profitable—The labor of cultivating a rich and a poor soil, is nearly the same; while the latter requires more manure, and consequently is more expensive—Poor soils, at the same time, may have such a command of lasting manures, or even of temporary sorts, like sea weed, as may render them profitable to cultivate.

5. There are various modes of improving soils.

Soils with acids or salts of iron, may be ameliorated by the application of lime or chalk. The sulphate of iron is thus converted into a manure.

If there be an excess of calcareous matter in the soil, as in chalky soils, it may be improved by the application of sand, or clay, or earthy substances.

Soils too abundant in sand, are benefitted by the use of clay, or marl, or vegetable matter.

A deficiency of vegetable or animal matter must be supplied by manure.

An excess of vegetable matter is to be removed by burning, or to be remedied by the application of earthy materials. The substances necessary for improving soils, are seldom far distant. Coarse sand is often found immediately upon chalk, and perhaps always under it, while beds of sand and gravel are commonly below clay, and clay and marl generally below sand.

The labor and expense of improving the texture or constitution of the soil, it has been justly observed, are amply repaid by the great permanent advantages they produce. Less manure is afterwards required, the future fertility of the soil is ensured, and capital, thus expended, secures forever the productiveness, and consequently the value of the land.—*New Eng. Farmer.*

From the Nashville Republican and Whig.

COMMERCIAL & PLANTING INTEREST.

From the best and most authentic information that can be obtained it seems that the prospect of the Tobacco crop this season, promises little better than that of the last, which is known to have been considerably short of the average quantity—Should this be generally the case, the article must not only keep up, but get to higher prices than it has commanded for some time. Both our staples of this country are likely thus to fall short, while crops of grain and other productions will probably be as good, both in quantity and quality as of other years.

We publish the following extracts from various parts of the Tobacco growing sections of country, all of recent date.

Burksville, Cumberland co. Ky. June 5, 1838.

The prospects for the growing tobacco crop in this section of the country are very unpromising, on account of the scarcity of plants, owing to the unusual cold spring—and the destruction of the early plant beds. From the reports that reached us from the adjoining counties we are led to believe that the prospects for the tobacco crop are not better there than in this section.

We do not believe that there will be more tobacco raised in Cumberland and the adjoining counties than last season, if as much.

Defeated Creek, Smith co. Ten. June 8, 1838.

In our section of the country comparatively but little Tobacco will be made. We never knew plants so scarce, nor did we ever experience such an unfavorable spring for the culture of Tobacco, we fear the crop will not be larger than last season.

Carthage, Smith co. June 8, 1838.

We have taken pains in enquiring into the prospect of the present growing crop of Tobacco, and have no hesitation in saying that we believe it will fall short of last year's supply.

Dixon's Springs, Smith co. Ten.

In our neighborhood, which is a very considerable tobacco growing district, the crop will, we believe, be a very small one. The scarcity of plants is such, that much of the ground that was intended for tobacco has been planted in corn—From all sections of the country so far as we have heard, the accounts are about the same.

Rome, Smith county, June 11, 1838.

In our section of the country the farmers complain much of the want of plants; very few crops are pitched, and should the fall not be late but little tobacco will be raised. Under the most favorable circumstances the crop will turn out a short one.

Goose Creek, Smith co. Ten. June 12, 1838.

On Goose creek there will be rather more Tobacco raised than last season, but not more than a third of a usual crop.

Hartsville, Sumner co. June 12, 1838.

The unfavorable spring has cut the prospect for crops of tobacco short. The planters in our county complain much of the want of plants, and many have planted their ground, set aside for Tobacco, in corn. It is the general belief that there will not be as much tobacco raised as last year, which was little enough compared with previous seasons. From the best information that we can get the present year's crop will fall short of last year's crop.

Gallatin, Sumner co. Ten.

From the best information we have been able to get there will be almost a total failure in this spring tobacco plants—and the crop must be very short.

GEOLOGICAL SURVEY OF MARYLAND,

By Professor Ducatel.

(CONTINUED.)

Sec. V.—*Mineral Resources of Montgomery county.*

It has already been stated that the principal mineral resource of the county lies in a region of country east of the Seneka, in which the prevailing rock is the *serpentine*—a rock easily recognised, as it usually presents some shade of green, sometimes of a uniform color, but more frequently the different shades and colors are disposed in stripes or veins, so that when polished it bears some resemblance to the skin of a serpent; whence its name. This rock is very frequently found to form the gangue, or matrix, of an ore of known and increasing value, usually designated as the *chrome ore.* The occurrence of the ore in this region was announced by me a few years back, which led to its extraction in several localities, under circumstances not well calculated, however, to subserve the interests either of its original proprietor or of the public. Contracts were entered into without a proper knowledge, on the part of owners of the lands, of the value of the material which they contained; and exclusive privileges were granted to make researches and excavations, under terms that, besides securing nearly all the benefits to one only of the contracting parties, prevented a full development of the resource to the county. It is much to be regretted that I was not consulted, in my official capacity, in the passage of these contracts; and that the requirement of the act authorizing the survey should have rendered it impossible for me to make a more minute examination of the county, at an earlier period. I did, however, what my duties to the public required at the time; namely, to point out the direction in which minerals of value might be expected to occur. On the other hand, it has been gratifying to find that these contracts embrace only some of the localities where the ore has been discovered; and that large bodies of it remain, of even a superior quality, whence the demads of our industry and of our commerce can be supplied with a more equable distribution of the profits arising out of them.

But there are other matters to be attended to, in order to secure to the county the entire fruition of this resource; and these are: 1st. To become well acquainted with the ore itself—2dly. To determine the quantity of that constituent of the

ore which alone gives it value; and 3dly. To adopt some judicious mode of extracting it.

Now, although it would seem only necessary to have a few opportunities of comparing specimens together to enable one to recognise the ore, and to discriminate a good from an indifferent one; yet, from the numerous mistakes that are made, even by those who pretend to a familiar acquaintance with it, it appears that more than an ordinary attention, or perhaps some natural aptness, is required, to enable one to seize readily those distinctive characters, by which to an accustomed eye it is recognized from all other substances. An experienced Mineralogist will rarely be at a loss, because the external characters of the ore are well marked; yet it is exceedingly difficult, if not impossible, to furnish such a description of them as would enable one who is not a Mineralogist to distinguish this from many other mineral species. Upon the whole, then, it seems that the best advice to be given to those who are interested in possessing a knowledge of this ore, is that they endeavor to familiarize themselves with its appearance by a frequent examination and comparison of specimens known to be of good quality; and, above all, to learn to discriminate the ore itself from the rock in which it is imbedded. To determine the quantity of that constituent, contained in the ore, which alone gives it value, requires some knowledge of chemical analysis; but those who have only a slight acquaintance with chemistry will readily understand and may avail themselves of the following simple process: A given quantity of the ore is to be first reduced to as fine a powder as possible, and then fused, in a *silver* crucible, with three times its weight of caustic potassa and salt-petre. The fused mass, which is a chromate of potassa, is then to be digested in water, until every thing soluble is taken up. The alkali being now saturated with acetic acid, the chromic acid is precipitated with a solution of acetate of lead. The precipitate, which is of a beautiful yellow color, is washed, dried, and ignited under low redness. It is a *chromate of lead*, (one of the most valuable products of the ore,) every 20,5 grs. of which contain 6.5 parts of chromic acid, or 5 of oxide of chromium, being the condition in which the metal is in the ore. To ascertain the other constituents of the ore, would of course require a more elaborate process, but this is not necessary to determine its commercial value.

As to the mode of extracting the ore, one of the methods hitherto pursued in Montgomery county proceeds upon a totally mistaken idea; namely, that what is termed the *surface ore* has been originally deposited in detached pieces, on or a little below, the surface of the ground. The formation of the ore is probably contemporaneous with that of the rock in which it occurs in veins, or rather *beds*. These veins frequently reach to the surface and penetrate to unknown depths. When they reach the surface, the rocks which contain them become disintegrated; fall to pieces, and cause the destruction of the vein of ore itself, the fragments of which are scattered about the vicinity. They are indications of the proximity of a vein, that can only be reached, however, by penetrating to the solid rock. The hope of finding any great amount of ore, under such circumstances, will, nine times out of ten, be disappointed.

When the vein has been reached, it is necessary to put a blast into it, and pursue it according to the appearances that may present themselves, but to predict confidently what will be the ultimate yield of the vein can in no instance be done; although there are more or less favorable signs: such as the size of the vein, which if large indicates generally corresponding extent; and the compactness of the ore, or rather its freeness from admixture with the surrounding rock, for when disseminated through the rock it is seldom worth extracting. On the other hand, as it has just been said, that ore occurs rather in beds than in veins, one should not be discouraged from continuing his operations at any spot, because the ore may suddenly give out; for it has been found that under such circumstances it frequently re-appears in another bed at no great distance, and this may commonly be expected when the ore from being in a massive state abruptly becomes disseminated through its matrix. It is always advisable in such cases to push on the exploration to some additional depth.

In selecting the ore for the market, care must be had to separate it carefully from its matrix, and other stoney bodies with which it may be associated, and these of course diminish its commercial value. Should any difficulties arise between the proprietors and purchaser as to the quality of the ore, it should be subjected to the unquestionable test of chemical analysis. The cupidity of some dealers will often prompt them to undervalue an article presented to them for sale, and from the same motive they solicit contracts, always for a trifling consideration, for the exclusive privilege of mining, where they have no intention of using it; as the sole object is to keep out of the market that of which they would endeavor to monopolize the sale, not only to the great injury of individuals, but of infinite damage to the public interests. The only fair engagements of this sort that can be entered into would seem to be, grant the privilege of digging for ore, at certain spots, and for limited periods, in consideration of a stipulated sum per ton of ore, which in reference to that under consideration ought to be from five to ten dollars according to the quality; the undertaker, being at all the expenses of mining. It is to be hoped that hereafter, the officer entrusted with an investigation of the mineral resources of the State, whose duty it is to dispense his services impartially to all parties, will be consulted with that freedom to which his official relations to the public entitle every one of his fellow-citizens.

That there is a great abundance of *Chrome Iron ore* in Montgomery county there can be no doubt. Within the period of the commencement of the Geological Survey of the State, one of the first fruits of which was to signalize its probable occurrence where it has since been found, hundreds of tons have been extracted, and it is impossible to estimate the quantity that remains to be brought to light. A large body of it lies about the head waters of the Seneka, and in one locality on the estate of Col. Lyde Griffith, a thick vein was observed protruding above the ground, from which several tons of the ore have since been extracted. Several analyses of this ore had shown that it contains from 35 to 40 per cent. of oxide of chromium; but as those interested in its purchase, comparing it with other richer ores, were unwilling to assign to it what I conceived to be its real value, and to remove all room for cavil, I engaged Mr. David Stewart, an experienced and well known chemist of Baltimore, to furnish me with the result of a qualitative and quantitative analysis of a specimen of the ore. I state the result as reported to me by Mr. Stewart, who informs me that he operated upon 30 grains, obtaining the *first* column below, the numbers of which being multiplied by 5 and converting the oxide of chromium into chromic acid gives the *second* column, whilst the *third* is produced by multiplying by 5, converting the oxide of iron into the protoxide, and calling the oxide of chromium chromic acid.

Analysis of Chrome Iron-ore from Montgomery county, by Mr. David Stewart.

Oxide of chromium	7.	Chromic acid	45.5	
Peroxide of iron	9.	Peroxide of ir.	40.5	
Alumina	1.5	Alumina	7.5	
Silica,	0.5	Silica	2.5	
Magnesia	a trace		0.0	
Undecompo'd ore	10.		"	
	28.			96.
			7.5	
			2.5	
			0.0	
			"	
				100.5

I subjoin the analysis by Mr. Seybert of the Chester Co. Pa. ore, which is considered the best, and that of the vicinity of Baltimore, by Beudant.

Analysis of Chrome Iron ore from Chester, by Seybert.

Oxide of chromium,	51.562
Peroxide of iron,	35.140
Alumina,	9.722
Ox. of magnesia,	trace.
Silica,	2.000
	98.425

Analysis of Chrome Iron ore from Baltimore, by Beudant.

Oxide of chromium,	39.514
Peroxide of iron,	36.004
Alumina,	13.002
"	"
Silica	10.596
	99.116

From the best information that has been obtained, the Chester Co. ore readily commands *forty dollars* per ton in Baltimore, so that by comparing that of Montgomery Co. with it, the latter is certainly worth from *twenty-five* to *thirty dollars*.

The Chrome-Iron-ore has been raised out of several other spots, and indications of it present themselves in many others, but in most places they are liable to contracts, which remaining in

abeyance, will retard for a long time the full development of this great mineral wealth to the county, and thus operate prejudicially to the public interest. I know of no rule, however, by which to impeach the validity of these contracts, and as they are in the possession of those who are fully aware of the value of the ore, it will probably be to their interest to fulfil them in due course of time. In some places where the contracts have been cancelled; and where shafts had been sunk, the intention was, upon a cessation of operations, to fill up the shafts, but it is not deemed advisable to do so, as there is no good reason to suppose that the ore has as yet been exhausted in any locality.

The other mineral resources of Montgomery Co. are of less importance.

In the upper portions of the secondary ridge of hills, known as the Pines, where the chrome-iron-ore also occurs, there are indications of beds of *Iron-ore*. On the farms of Mr. Dickinson, Mr. Otho Magruder, and Mr. Robinson, numerous masses of the brown *Hematite* are seen imbedded in a red clayey soil, containing likewise blocks of a quartz-rock, with cavities that are filled with drusic crystals of hyaline quartz, calcedony and other forms of this silicious mineral. The *Sulphuret of Iron* occurs frequently, especialiy in the talcose slates and argillites of Parr's ridge, but no where in sufficieut abundance to render it an object of interest in an economical respect. The *Black oxide* of *Manganess* has been raised in the vicinity of Brookeville, but does not appear to exist in any abundance. Indications of *Copper* are found in the neighborhood of Barnsville; and at the distance of about 2½ miles from Poolsville in a S. W. direction, excavations have been made remotely in search of this metal. I have advised the proprietor of the land to re-open the shafts, with a view to a better inspection of what appears to be no unfavorable indication of a vein of copper-ore. The shaft which was sunk, also a some remote period, at what is called the *Mush Pot*, on the road between Rockville and Darnestown, was doubtless likewise in search of copper, and not of silver as generally believed, but the indication are very feeble. A specimen of *Galena* was presented to me, said to have been found, on the farm of Mr. Nathan Cook; among the loose rocks on the slope of a hill. I had no success in tracing it to its actual source, nor were any other pieces found, but directions were left to conduct further researches. Ledges of a fine grained yellow *Quartzite* occur in the vicinity of Unity and near Mr. Joseph Bond's Mill, that yield excellent whetstones.

Among the mineral resources of the county, must also be enumerated the well known quarries of beautiful *Freestone*, near the mouth of Seneka, on the estate of Mr. Archibald Lee, which the facilities of transportation by the Chesapeake and Ohio Canal render so extensively available. *Soapstone* of good quality occurs in several places. On the road between Rockville and Georgetown, 7 miles from the latter, Mr. Robart Y. Brent is about to open a quarry and to erect suitable buildings and arrangements for cutting and trimming it. Mr. Joseph Bond, near Snell's Bridge, has a similar intention; and some use has already been made of the Soapstone occurring in the vicinity of Mr. Andrew Clopper's Mill, on the Seneka.

Before concluding the account of the mineral resources of this county, I will call the attention of the people as I have already done that of the inhabitants of the upper parts of Cecil Co. to the use which is made in some sections of our country, of the several varieties of *Talcs*, as well as *Soapstones*, that are now ground into an impalpable powder with whale oil, and largely distributed under the name of *Stone Paints*. *Talcs* well suited for this purpose occur on the road between Darnestown and Rockville, about six miles from the latter place.

TO MEASURE HAY IN THE STACK.

When hay is sold by the stack, or where farmers wish to know the quantity they may have on hand, measurement, iustead of the tedious process of weighing, may be conveniently practiced. The first object, is to ascertain the number of cubic yards contained in the stack. As the practice of building them round or circular, is by far the most common, it is necessary in ascertaining the contents of such, to measure round them at different heights but at *regular* distances, (omitting the part above the eaves, if it is a regular cone, as is usual) and these measurements added together and divided by their joint number will give the mean circumference. The square of this is then to be multiplied by the decimal .0796; the product thus obtained is again to be multiplied by the height up to the eave with one third of the rise from the eaves to the peak, and this last product will be the number of cubic feet in the stack. Divide this by 27 and it will give the cubic yards. The measurement round, may be performed by a cord, drawing it close to the stack, and allowing about six inches in depth for loose hay. The height may be known with sufficient accuracy by placing a pole perpendicularly beside the stack, standing off a few rods, and observing with the eye.

If the stack is square or oblong, mutiply the medium length by the medium breadth, and that product by the medium height, (which is the height to the eaves and one third of the rise of the roof taken together,) and the last product will be the solid content.

If the hay has been put up in moist a condition as admits of safety, and has stood six months in the stack, ten cubic yards will make a ton. If it has been put up very dry, twelve will be required, if chiefly clover, even as many as thirteen. If the stack is very large, and has been put up quite moist so as to need copious salting, eight or nine cubic yards will make a ton. According to the experience of the writer, the difference between the most moist and the most dry, at the time of stacking, is after settling about as eight to twelve. These circumstances, are then all to be taken into consideration. But notwithstanding this variation, the method of measuring is far more accurate than that of *guessing* the quantity. J. J. T.

Genesee Farmer.

Repelling of insects—Taking the earth away from the roots of trees, and returning back earth mixed with a small quantity of sulphur, will keep insects from ascending the trees. Other repellants of insects may answer the purpose for one spring—such as quicklime, fine salt, old urine, strong soap-suds, a strong decoction of tobacco, onions, &c.—*Farmer's Assistant.*

Horticultural Society of Md. June 9.

Was exhibited this day:

Mrs. Law—Cactus Speciosus, a fine plant, in most splendid bloom—a bouquet of beautiful and very choice flowers.

Henry Rodewald—A fine collection of pansies, and some new roses, Lee's crimson perpetual, white perpetual moss, belle elise, addo, and one variety unknown.

Zebulon Waters—Two beautiful bouquets of choice flowers.

John Feast—Gorteria pavonia, alstroemeria psithcina, enca pregnans, banheria uchiicides, fuschia globosa, septhospermune scandens, verbena melendies, some new varieties of petunias and peloggoniums, many varieties of new fine roses, white perpetual moss, &c.

Edward Kurtz—Yellow noisette rose, azalia sedifolia, verbena tweedinna, perpetual white moss rose.

June 23d—Mr. Zebulon Waters—10 varieties carnations.

Mr. John Feast—Crassula ceccennea, very fine, with other flowers.

Zebulon Waters—2 varieties of very fine cherries.

Mrs. Isaac Munroe—A plate of very superior cherries, the grand Tartarian.

Cut-worm—In some years these larvæ are very destructive to the Indian corn, and of the contrivances for destroying them we have seen that of Parke Shee, of Delaware county, in Pennsylvania, is the most simple and most expeditious. A pair of old wheels from a cart or wagon are fitted with several projections like the cogs of a spur wheel in a mill, which are so formed as to impress in the earth a hole 4 inches deep. The smooth track which the wheel makes on the soft ground, induces the worm in its nocturnal wanderings to follow on till it tumbles into the pit. It cannot climb out, and the hot sun destroys it.—*Farmer.*

SAXON RAMS FOR SALE.

For sale, 4 full bred Saxon Rams, 3 to 4 years old—Enquire of EDWARD KENLY.

july 3 3t

A DURHAM BULL.

For sale, a superior Bull—he is of fine size and unexceptionable pedigree, which will be given next week—he comes from a strain of deep milkers, and is himself the sire of several fine animals. Price $500. je 26 3t

SUPERB DOUBLE DAHLIAS.

ALSO, GARDEN AND FLOWER SEEDS.

The subscriber offers for sale at his establishment the best collection of Double *DAHLIAS* offered to the public, and will warrant every root true to name and colour, but they are too well known to need any comment in their favor, as most all amateurs in the vicinity have seen them in bloom to their great satisfaction, so those who wish to have roots that are genuine, apply at the right place, and lower than any other in the city as to quality.

Besides he offers a general and good collection of *Garden and Flower SEEDS*, fresh imported, that cannot be raised to perfection in this country; he has selected from Europe, and will dispose of them on reasonable terms, with a general collection of Greenhouse, Herbaceous and hardy plants, also Bulbous Roots. Catalogues can be had at his establishment, corner of Pine and Lexington street, Baltimore, by

JOHN FEAST,
Florist & Seedsman.

ap 24 3t

BALTIMORE PRODUCE MARKET.

☞ *These Prices are carefully corrected every* MOND

	PER	FROM	TO
BEANS, white field,	bushel.	1 00	1 10
CATTLE, on the hoof,	100lbs	9 00	10 00
CORN, yellow	bushel	72	73
White	"	69	70
COTTON, Virginia,	pound	9	11
North Carolina,	"	10	11
Upland,	"	9½	11
Louisiana —— Alabama	"	11	12
FEATHERS,	pound.	48	50
FLAXSEED,	bushel.	1 12	——
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	——
Do. do. baker's	"	——	——
Super How. st. from stores	"	7 87	8 00
" " wagon price,	"	7 37	7 50
City Mills, super	"	7 75	8 00
" extra	"	8 00	——
Susquehanna,	"	8 00	——
Rye,	"	4 50	4 62
Kiln-dried Meal, in hhds.	hhd.	18 00	——
do. in bbls.	bbl.	3 50	——
GRASS SEEDS, whole. red Clover,	bushel.	——	11 00
Kentucky blue	"	2 50	3 00
Timothy (herds of the north)	"	2 25	2 50
Orchard,	"	2 00	2 50
Tall meadow Oat,	"	——	3 00
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.	10 00	15 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	
HOGS, on the hoof,	100lb.	7 00	——
Slaughtered,		——	——
HOGS—first sort,	pound.	9	——
second,	"	7	——
refuse,	"	5	——
LIME,	bushel.	33	34
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	33	34
PEAS, red eye,	bushel.	——	1 12
Black eye,	"	1 00	1 12
Lady,	"	——	——
PLASTER PARIS, in the stone, cargo,	ton.	3 62	——
Ground,	barrel.	1 50	——
PALMA CHRISTA BEAN,	bushel.	——	——
RAGS,	pound.	3	4
RYE,	bushel.	80	87
Susquehannah,		——	none
TOBACCO, crop, common,	100 lbs	3 50	4 00
" brown and red,	"	4 00	6 00
" fine red,	"	8 00	10 00
" wrappery, suitable for segars,	"	10 00	20 00
" yellow and red,	"	8 00	10 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"	——	——
" ground leaf,	"	——	——
Virginia,	"	4 50	6 00
Rappahannock,	"	——	——
Kentucky,	"	5 00	8 00
WHEAT, white,	bushel.	1 85	— —
Red, best	"	1 55	1 60
Maryland inferior	"	1 50	1 55
WHISKEY, 1st pf. in bbls.	gallon.	33½	34
" in hhds.	"	32	—
" " wagon price,	"	bbls	31
WAGON FREIGHTS, to Pittsburgh,	100 lbs	1 25	— —
To Wheeling,	"	1 50	——
		washed.	unwash
WOOL, Prime & Saxon Fleeces,	pound.	40 to 50	20 22
Full Merino,	"	35 40	18 20
Three fourths Merino,	"	30 35	18 20
One half do.	"	25 30	18 20
Common & one fourth Meri.	"	25 30	18 20
Pulled,	"	28 30	18 20

MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multica ulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this all, and which he will sell on moderate terms.

EDWARD P. ROBERTS.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.	——	——
BACON, hams, new, Balt. cured	pound.	13	13½
Shoulders, do	"	11	—
Middlings, do	"	11	—
Assorted, country,	"	8½	9½
BUTTER, printed, in lbs. & half lbs.	"	20	25
Roll,	"	—	—
CIDER,	barrel.	——	——
CALVES, three to six weeks old	each.	5 00	6 00
COWS, new milch,	"	25 00	40 00
Dry,	"	12 00	15 00
CORN MEAL, for family use,	100lbs.	1 62	——
CHOP RYE,	"	1 50	1 60
EGGS,	dozen.	12½	——
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75	10 00
No. 2,	"	9 50	——
Herrings, salted, No. 1,	"	4 25	4 75
Mackerel, No. 1, —— No. 2	"	——	——
No. 3,	"	——	——
Cod, salted,	cwt.	3 00	3 25
LARD,	pound.	10	11

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	par	VIRGINIA.	
Branch at Baltimore,	do	Farmers Bank of Virgi.	1½
Other Branches,	do	Bank of Virginia,	do
MARYLAND.		Branch at Fredericksburg,	do
Banks in Baltimore,	par	Petersburg,	do
Hagerstown,	½a	Norfolk,	do
Frederick,	do	Winchester,	do
Westminster,	do	Lynchburg,	do
Farmers' Bank of Mary'd,	do	Danville,	do
Do. payable at Easton,	do	Bank of Valley, Winch.	par
Salisbury, 1 per ct. dis.		Branch at Romney,	par
Cumberland,	par	Do. Charlestown,	par
Millington,	do	Do. Leesburg,	1½
DISTRICT.		Wheeling Banks,	3½a4
Washington, Georgetown, Alexandria, Banks, ½p.c.		Ohio Banks, generally	5a6
PENNSYLVANIA.		New Jersey Banks gen.	3
Philadelphia,	par	New York City,	par
Chambersburg,	½	New York State,	do
Gettysburg	do	Massachusetts,	1½a2
Pittsburg,	2½	Connecticut,	1½a2
York,	½	New Hampshire,	1½a2
Other Pennsylvania Bks.	2	Maine,	1½a2
Delaware [under $5]	4	Rhode Island,	1½a2
Do. [over 5]	1½	North Carolina,	5
Michigan Banks,	10	South Carolina,	6a7
Canadian do.	10	Georgia,	8a10
		New Orleans	8a10

FOR SALE,

Two superior DEVON bulls, 4 years old this spring, of the purest blood in the country, fine form and remarkably large. Any gentleman wishing to procure one will find it to his advantage to embrace the present opportunity, as they will be sold at the low price of $100 each, deliverable in Baltimore.

Applications in writing, *post paid*, to be made to the subscriber.

EDWD. P. ROBERTS, Baltimore, Md.

may 29 3t

NEW BALTIMORE SEED STORE.

THE Subscriber having located himself in *Grant street, near Pratt, three doors* in the rear of *Dinsmore & Kyle's* Grocery Store, takes this early method of informing his friends and the public, that he has commenced the GARDEN AND FIELD SEED BUSINESS, and solicits a portion of public patronage. He has on hand and intends *keeping*, at all *times*, a constant and general assortment of the very best FIELD AND GARDEN SEEDS, a part of the latter, being of the last year's importation, and all the growth of 1837.

Also GARDEN AND FARMING TOOLS, of vari ous kinds; a few barrels of ITALIAN Spring WHEAT; BADEN CORN, raised, and carefully selected by Col. Mercer—DUTTON; MANDAN; SIOUX; AND EARLY SUGAR CORN; CLOVER; TIMOTHY, ORCHARD, & HERD'S GRASSSEEDS; BUCKWHEAT; OATS; MILLET, WHITE, DUCH CLOVER; LUCERNE; TREFOIL; SAINFOIN, ENGLISH RYE GRASS, &c. &c.

Farmers, Gardeners, Merchants, Captains of Vessels, and others, are invited to give him a call, as they can be supplied not only with Field and Garden Seeds of all kinds, but also with PLOUGHS; HARROWS; STRAW CUTTERS; CORN SHELLERS; WHEAT FANS, WHEAT CRADLES, &c. &c., together with all other kinds of useful implements of Husbandry, manufactured and kept constantly for sale by John T. Durding & Co. at their Agricultural Store, also in Grant street. Orders for articles in the above line by mail or otherwise, shall be faithfully and punctually executed.

THOMAS DENNY,

Grant street, 3 doors in the rear of Dinsmore & Kyle's

WATKINS' PATENT WHEAT FANS, HARVEST TOOLS, &c.

THE subscribers, being confident of the superiority of the Watkins' Fan have made arrangements with the Patentee to manufacture the article in this city.

The difficulty of procuring these fans from Washington county in this State, (where they were formerly manufactured) and the high price at which they were sold has much retarded their introduction in our immediate vicinity; they are now manufactured by us at a reduction of about 40 per cent. on original price, and made of warranted materials and by experienced workmen. The Riddles and Screen of this fan are operated upon by a simple crank motion, and the general construction of the fan is such a to give the wind a proper direction and great force on the riddles, thus enabling farmers to clean double the quantity of grain and put it in better order for market than can be done by those in common use. Our assortment of Fans and Harvest Tools are as follows, viz:

Watkins' Patent Fans	$30.00
do do with unshipping heads	32.00
Common Crank Shake Patent Fans,	25.00
do do do with unship heads	27.00
do Dutch Fans,	20.00
Box Fans; a very complete fan and well suited for small farms,	16.00
Grain Cradles with 4 a 8 fingers and warranted Scythes attached,	4.00
do do with wire braces,	5.00
Grass Scythes and Sneaths, in complete order for mowing	2.25
Grain, Grass and Bramble Scythes,	
Sickles and Grass Hooks,	
Scythes Stones, assorted kinds, Ripes for whetting Grain Scythes,	
Horse and Hand Hay Rakes,	
Cradlers' Hammers,	
Hay Forks, of sizes suitable for making and pitching hay,	
Threshing Machines, &c.	

ALSO,

Corn and Tobacco Cultivators, Corn Harrows, Field and Garden Hoes, and as usual, a large assortment of IMPLEMENTS AND SEEDS, comprising nearly every variety used by the planter. ROBERT SINCLAIR, Jr. & Co.

Light street near Pratt street wharf.

june 4 2t

DAHLIA ROOTS.

The subscriber can furnish any quantity of DAHLIA ROOTS to the number of *one thousand*, recommended to be a choice variety, all of the double kind, and from the well known nursery of Samuel Reeve, Esq'r. near Salem, New Jersey. I can also furnish from the same nursery very superior APPLE TREES for spring planting, if orders are given in soon for them. Peach Trees cannot be furnished from the said nursery before next fall. J. S. EASTMAN.

CONTENTS OF THIS NUMBER.

Notice of a new paper devoted to the silk culture—do. of the Delaware Register—Dutton corn—the hay harvest—cultivation of beets—Clairmount Nursery—timothy meadows—Surrey farm—hint to silk growers—the morus multicaulis—mulberry plantation—mineral manures—on mowing—efficacy of lightning rods or conductors—on soils—prospects of the cotton crop—geological survey of Maryland—to measure hay in the stack—repelling of insects—Md. Horticultural Society—the cut-worm—prices current—advertisements.